

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listing, of claims in the application:

**Listing of Claims:**

1. (currently amended) A method, comprising:

receiving at a gateway device a first communication from a first network that is addressed for a network element of a second network, where the second network is based on a different technology than the first network and where the gateway device comprises a layer 3 gateway;

transmitting the first communication from the gateway device to the second network;

receiving at the gateway device a second communication from the second network that is addressed for a network element of the first network;

transmitting the second communication from the gateway device to the first network;

periodically polling the gateway device to obtain operating parameters related to communications between the first and second networks, the operating parameters including at least two of information identifying Internet Key Exchange security associations (IKE SAs) no longer being used, ~~information identifying node throughput~~, information identifying a number of toggles between an active card and a standby card in the gateway device, or information identifying processor utilization in the gateway device;

analyzing the operating parameters; and

generating a health report related to the stability of at least the gateway device, the health report being based upon analysis of the operating parameters.

2. (currently amended) The method of claim 1 where the polling of the gateway device

to obtain operating parameters further comprises obtaining information related to a flowcache and information identifying node throughput.

3. (previously presented) The method of claim 1 where the polling of the gateway device to obtain operating parameters comprises obtaining information identifying IKE SAs no longer being used.

4. (previously presented) The method of claim 1 where the polling of the gateway device to obtain operating parameters further comprises obtaining node configuration information.

5. (previously presented) The method of claim 4 where the node configuration information comprises a number of layer 3 connections.

6. (previously presented) The method of claim 5 where the node configuration information comprises a number of VPRN (virtual private routed network) connections.

7. (previously presented) The method of claim 5 where the node configuration information comprises a number of IPSec tunnels.

8. (previously presented) The method of claim 1 where the first network comprises the Internet.

9. (previously presented) The method of claim 8 where the second network comprises at least one of a frame relay network, an asynchronous transfer mode network, private internet protocol network or an internet protocol virtual private network.

10. (previously presented) The method of claim 1 where the gateway device further implements a firewall function when transmitting communications between the first and second networks.

11. (previously presented) The method of claim 1 where the analyzing of the operating parameters comprises comparing the operating parameters to a threshold value.

12. (previously presented) The method of claim 11, further comprising setting a flag if the operating parameters exceed the threshold value.

13. (previously presented) The method of claim 12 where the comparing of the operating parameters to a threshold value comprises comparing the operating parameters to a warning threshold value and comparing the operating parameters to an augment threshold value.

14. (currently amended) A method, comprising:  
periodically polling, via a network device, an inter-network gateway to collect data related to the inter-network gateway, the data including at least two of information related to a flowcache configured to store connection information, information identifying a number of

virtual private routed networks, or information identifying a number of internet key exchange security associations (IKE SAs) not being used;

processing, via the network device, the data to generate a number of parameters;

generating, via the network device, a report based on the parameters, where the report relates to stability of the inter-network gateway; and

automatically transmitting, via the network device, the report, the report being transmitted without human intervention.

15. (currently amended) The method of claim 14 where the data comprises information related to the flowcache ~~configured~~ to store connection information, information identifying a number of virtual private routed networks, and information identifying a number of IKE SAs not being used.

16. (previously presented) The method of claim 14 where the generating of the report comprises indicating whether any of the parameters indicate a possibility of a network instability.

17. (previously presented) The method of claim 16 where the generating of the report comprises generating a report that has a warning flag if a parameter exceeds a first threshold and generating a report that has an augment flag if a parameter exceeds a second threshold.

18. (previously presented) The method of claim 14 where the polling of the inter-

network gateway to collect data related to the inter-network gateway comprises collecting data related to the flowcache.

19. (previously presented) The method of claim 18 where the parameters comprise statistics related to flows, predicted flows, connections, conversations and packets.

20. (previously presented) The method of claim 14 where the polling of the inter-network gateway to collect data related to the inter-network gateway comprises collecting data identifying the number of virtual private routed networks.

21. (previously presented) The method of claim 14 where the polling of the inter-network gateway to collect data related to the inter-network gateway comprises collecting data identifying the number of IKE SAs not being used.

22. (previously presented) The method of claim 21 where the parameters comprise a count of a number of dead IKE SAs.

23. (previously presented) The method of claim 14 where the polling of the inter-network gateway to collect data related to the inter-network gateway further comprises at least one of collecting data identifying a number of card toggles, identifying CPU utilization or identifying memory utilization.

24. (currently amended) A tangible computer readable memory comprising computer-executable instructions, the computer-executable instructions comprising:

computer program code to automatically, periodically poll a plurality of inter-network gateways to collect data related to the plurality of inter-network gateways, the data identifying at least two of information associated with a flowcache ~~configured~~ to store connection information, information identifying a number of virtual private routed networks, or information identifying a number of dead internet key exchange security associations;

computer program code to process the data to generate a number of parameters;

computer program code to generate a report based on the parameters, where the report relates to stability of the inter-network gateways; and

computer program code to automatically transmit the report, the report being transmitted without human intervention.

25. (previously presented) The computer readable memory of claim 24 where the computer-executable instructions operate on a UNIX-based operating system.

26. (previously presented) The computer readable memory of claim 24 where the computer program code to automatically, periodically poll the gateways is further to initiate a SNMP connection with each of the gateways.

27. (previously presented) The computer readable memory of claim 24 where computer program code to automatically, periodically poll the gateways is further to initiate a command

line interface (CLI) connection with each of the gateways.

28. (previously presented) The computer readable memory of claim 24 and further comprising computer program code to write data collected from the gateways into a file.

29. (previously presented) The computer readable memory of claim 28 where the computer program code to write data is further to write raw data into a raw data file and to write summary data into a summary data file.

30. (previously presented) The computer readable memory of claim 24 where the computer program code to automatically transmit the report comprises computer program code to automatically transmit an ASCII file via e-mail.

31. (previously presented) An apparatus for use in monitoring the stability of a network, the apparatus comprising:

a processor;

a memory coupled to the processor; and

an interface mechanism coupled to the processor;

where the processor is to:

periodically poll an inter-network gateway through the interface mechanism to collect data related to the inter-network gateway, the data including at least two of information identifying a number of Internet Key Exchange security associations (IKE SAs) no longer being used, information identifying node throughput, information identifying a number of

toggles between an active card and a standby card in the inter-network gateway or information identifying processor utilization in the inter-network gateway,

generate a report based on the data, where the report relates to stability of the inter-network gateway, and

cause the report to be transmitted to a remote location.

32. (previously presented) The apparatus of claim 31 where the data further comprises at least one of information related to at least one of a flowcache configured to store connection details, or information identifying a number of virtual private routed networks.

33. (previously presented) The apparatus of claim 32 where the data comprises data related to the flowcache the number of a virtual private routed networks, and the number of IKE SAs no longer being used.

34. (previously presented) The apparatus of claim 32 where the processor, when polling the inter-network gateway to collect data related to the inter-network gateway, is to collect data related to the flowcache.

35. (previously presented) The apparatus of claim 34 where the report comprises statistics related to flows, predicted flows, connections, conversations and packets.

36. (previously presented) The apparatus of claim 32 where the processor, when polling the inter-network gateway to collect data related to the inter-network gateway, is further to



collect data related to a virtual private routed network.

37. (previously presented) The apparatus of claim 32 where the processor, when polling the inter-network gateway to collect data related to the inter-network gateway, is to collect data identifying the number of IKE SAs no longer being used.

38. (previously presented) The apparatus of claim 31 where the processor, when generating the report, is further to indicate whether any of the parameters indicate a possibility of a network instability.

39. (previously presented) The apparatus of claim 38 where the report comprises a warning flag when a parameter exceeds a first threshold and an augment flag when a parameter exceeds a second threshold.